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IN THE CLAIMS:

1 .(currently amended) A process to enable the control of photolithographic feature size on structures having one or more severe non-flat topologies for the purpose of performing successful photolithography thereon using photolithographic equipment defining a wavelength source, a numeric aperture, photoresist, and conformal deposition or depositions, the process comprising the steps of:

first determining a depth of focus from at least the wavelength of the source and the numeric aperture of the photolithographic equipment;

second determining a thickness of the photoresist being used;

third determining characteristics of the conformal deposition being used;

evaluating from the above first, second, and third determinations one or more acceptable layout dimensions of the one or more severe non-flat topologies for satisfactory photolithographic processing;

forming a severe non-flat topology wherein the layout dimensions are changed, if necessary, to comply with the one or more acceptable layout dimensions.~~one or more acceptable layout dimensions of the one or more severe non-flat topologies as a function of photolithographic equipment and photoresist thickness employed and conformal depositions;~~

~~forming the one or more severe non-flat topologies with said one or more acceptable layout dimensions; and~~

~~substantially reducing the severity of the formed one or more severe non-flat topologies.~~

- 1 2.(currently amended) The process as claimed in Claim 1 wherein the step of determining
- 2 evaluating said one or more layout dimensions of the one or more severe non-flat topolo-

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3 gies includes comparing of the depth-of-focus of the particular photolithographic equip-
4 ment and the thickness of a photoresist film applied to the surface of the structure against
5 the severity of the non-flat topologies.

1 3. (currently amended)The process as claimed in **Claim 1** wherein ~~the~~ a structure having
2 a severe non-flat topology is a semiconductor structure and the step of forming the one or
3 more severe non-flat topologies includes etching the semiconductor structure.

1 4. (currently amended)The process as claimed in **Claim 1** wherein the step of substan-
2 tially ~~reducing the severity of the formed one or more~~ forming a severe non-flat topolo-
3 gies includes the step of applying a conformal layer of material on a structure having a
4 severe non-flat topology ~~the structure~~ including over the area of the formed one or more
5 severe non-flat topologies.

1 5. (currently amended)The process as claimed in **Claim 4** wherein the step of applying
2 said conformal layer of material includes applying a plurality of layers of conformal ma-
3 terial on the structure having a severe non-flat topology including over the area of the
4 formed one or more severe non-flat topologies.

1 6. (original)The process as claimed in **Claim 5** wherein one or more of said plurality of
2 layers of conformal material is polysilicon.

1 7. (original)The process as claimed in **Claim 6** wherein one of said plurality of layers of
2 conformal material is an insulative material.

1 8. (original)The process as claimed in **Claim 5** wherein said one or more of plurality of
2 layers are applied in a blanket deposition.

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1 9. (currently amended)The process as claimed in **Claim 4** further comprising the step of
2 applying a layer of photoresist material over said conformal layer, ~~one or more severe~~
3 ~~non-flat topologies after said filing in step.~~

1 10. (original)A structure having a surface for receiving a photoresist film suitable for ex-
2 posure by photolithographic equipment, the structure comprising: one or more severe
3 non-flat topologies, wherein each of said one or more severe non-flat topologies is
4 formed with layout dimensions determined as a function of operational characteristics of
5 the photolithographic equipment, photoresist thickness, and conformal depositions, and a
6 filler to substantially fill in said one or more severe non-flat topologies.

1 11. (original)The structure as claimed in **Claim 10** wherein the determination of said lay-
2 out dimensions is made based upon comparing the depth-of-focus of the particular pho-
3 tolithographic equipment and the thickness of a photoresist film applied to the surface of
4 the structure against the severity of the non-flat topologies.

1 12. (original)The structure as claimed in **Claim 10** wherein said one or more severe non-
2 flat topologies are etched topologies.

1 13. (original)The structure as claimed in **Claim 10** wherein the structure is a semicon-
2 ductor structure and said filler is formed of a conformal layer of material on the semicon-
3 ductor structure including over the area of the one or more severe non-flat topologies.

1 14. (original)The structure as claimed in **Claim 13** wherein said conformal layer includes
2 a plurality of layers of conformal material.

1 15. (original)The structure as claimed in **Claim 14** wherein one or more of said plurality
2 of layers of conformal material is polysilicon.

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1 16. (original)The structure as claimed in Claim 15 wherein one of said plurality of layers
2 of conformal material is an insulative material or a conductive material.

1 17. (original)The structure as claimed in Claim 14 wherein one or more of said plurality
2 of layers is applied in a blanket deposition.

1 18. (currently amended)A micro-electro mechanical system including a structure having a
2 surface for receiving a photoresist film suitable for exposure by photolithographic
3 equipment, the ~~device~~ micro-electro mechanical system comprising: one or more severe
4 non-flat topologies, wherein each of said one or more severe non-flat topologies is
5 formed with layout dimensions changed, if necessary, as determined as a function of op-
6 erational characteristics of the photolithographic equipment, photoresist thickness, and
7 conformal depositions, and a filler to substantially fill in said one or more severe non-flat
8 topologies.

1 19. (original)The device as claimed in Claim 18 wherein said structure forms a portion of
2 a mirror system.

1 20. (original)The device as claimed in Claim 18 wherein said structure forms a portion of
2 a pump system.

1 21. (original)The device as claimed in Claim 18 wherein said structure forms a portion of
2 a pressure sensor system.

1 22. (original)The device as claimed in Claim 18 wherein said structure forms a portion of
2 a chemical sensor system.

1 23. (original)The device as claimed in Claim 18 wherein said structure forms a portion of
2 an accelerometer system.

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- 1 24. (currently amended) The device as claimed in Claim 18 wherein said structure forms
- 2 a portion of a micro sized medical implement ~~sensor system~~.